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October 6, 2004

To: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/091,983 03/06/02 |  
Dong Zhong et al.  
IMPROVED ULTRA-THIN GATE OXIDE  
THROUGH POST DECOUPLED PLASMA  
NITRIDATION ANNEAL  
| \_\_\_\_\_ |

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on October 12, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date SB 10/12/04

This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Action under 1.113 or Notice of Allowance under 1.311 (37CFR 1.97(c)).

I hereby state that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this statement.

The paper by S.V. Hattangady et al., entitled "Ultrathin nitrogen-profile engineered gate dielectric films," IEDM 96-495, 1996 IEEE, 19.1.1 to 19.1.4, presents a simple and novel scheme for the formation of -4nm gate dielectric films with nitrogen at the top (Gate electrode/dielectric) interface.

The paper by H.N. Al-Shareef et al., entitled "Plasma nitridation of very thin gate dielectrics," Elsevier Science B.V. 2001, Microelectronic Engineering 59(2001), pp. 317-322, compares the performance of NMOSFET devices with nitrided gate oxides using two plasma-based nitridation techniques.

CS-01-067

U.S. Patent 6,342,437 to Moore, "Transistor and Method of Making the Same," provides an improved surface P-channel transistor and a method of making the same.

Sincerely,

A handwritten signature in black ink, appearing to be 'SBA', written over the printed name.

Stephen B. Ackerman,  
Reg. No. 37761

Application Number

10/091,983

Dong Zhang et al.

03/06/02

Group Art Unit

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(Use several shouts if necessary)

## EXAMINER

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 IF APPROPRIATE

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COUNTRY

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Translation

YES	NO
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OTHER DOCUMENTS (Including Author, Title, Date, Portion or Pages, Etc.)

- "Ultrathin nitrogen-profile engineered gate dielectric film," by S.V. Hattangady et al., IEDM 96-495, 1996 IEEE, 19.1.1 to 19.1.4.
- "Plasma nitridation of very thin gate dielectrics," Elsevier Science, B.V. 2001, by H.N. Al-Shereef et al., Microelectronic Engineering 59 (2001), pp. 317-322.

## EXAMINE

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.